WHAT IS CLAIMED IS:

1. A cell search method for a mobile station in a mobile communication system, the method comprising a first step of despreading a received signal using a common spreading code common to all slots and detecting slot boundaries on the basis of a first average correlation coefficient, a second step of despreading the signal on the basis of said slot boundaries detected at the first step, using different individual spreading codes for said respective slots, and detecting frame boundaries and a scramble code group on the basis of a second average correlation coefficient, and a third step of descrambling a common pilot signal on the basis of said frame boundaries and scramble code group detected at the second step, and detecting a scramble code on the basis of a third average correlation coefficient, the method being characterized in that:

the detection results for said frame boundaries and scramble code are judged on the basis of a ratio of the largest one of a plurality of said third average correlation coefficients to a predetermined reference value.

2. The cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of interference power calculated from said received

signal by said mobile station.

3. The cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of said plurality of third average correlation coefficients except the largest one thereof.

4. The cell search method for a mobile station in a mobile communication system according to Claim 3, characterized in that said reference value is an average or a median of said plurality of third average correlation coefficients except the largest one thereof.

5. The cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of a plurality of said second average correlation coefficients except the largest one thereof.

6. The cell search method for a mobile station in a mobile communication system according to Claim 5, characterized in that said reference value is an average or a median of said plurality of second average correlation coefficients except the largest one thereof.

7. The cell search method for a mobile station in a

mobile communication system according to Claim 1, characterized in that said reference value can be set on the basis of a plurality of said first average correlation coefficients.

8. The cell search method for a mobile station in a mobile communication system according to Claim 7, characterized in that said reference value is an average or a median of an arbitrary number of said first average correlation coefficients selected from said plurality of first average correlation coefficients in the ascending order of the value.

9. A cell search method for a mobile station in a mobile communication system, the method descrambling a common pilot signal on the basis of information on known scramble codes and frame boundaries, and detecting a scramble code on the basis of an average correlation coefficient, the method being characterized in that:

detection results for said frame boundaries and scramble codes are judged on the basis of a ratio of the largest one of a plurality of said average correlation coefficients to a predetermined reference value.

10. The cell search method for a mobile station in a mobile communication system according to Claim 9, characterized in that said reference value is set on the

basis of interference power calculated from said received signal by said mobile station.

11. The cell search method for a mobile station in a mobile communication system according to Claim 10, characterized in that said reference value is set on the basis of a plurality of said average correlation coefficients except the largest one thereof.

12. The cell search method for a mobile station in a mobile communication system according to Claim 11, characterized in that said reference value is an average or a median of a plurality of said average correlation coefficients except the largest one thereof.

13. A cell search apparatus for a mobile station in a mobile communication system, the apparatus comprising a first detector for despreading a received signal using a common spreading code common to all slots and detecting slot boundaries on the basis of a first average correlation coefficient, a second detector for despreading the signal on the basis of said slot boundaries detected at the first step, using different individual spreading codes for said respective slots, and detecting frame boundaries and a scramble code group on the basis of a second average correlation coefficient, and a third detector for descrambling a common pilot signal on the basis of said

frame boundaries and scramble code group detected at the second step, and detecting a scramble code on the basis of a third average correlation coefficient, the apparatus being characterized by comprising:

judgement means for judging the detection results for said frame boundaries and scramble code on the basis of a ratio of the largest one of a plurality of said third average correlation coefficients to a predetermined reference value.

14. The cell search apparatus for a mobile station in a mobile communication system according to Claim 13, characterized in that said reference value is set on the basis of interference power calculated from said received signal by said mobile station.

15. The cell search apparatus for a mobile station in a mobile communication system according to Claim 13, characterized in that said reference value is set on the basis of said plurality of third average correlation coefficients except the largest one thereof.

16. The cell search apparatus for a mobile station in a mobile communication system according to Claim 15, characterized in that said reference value is an average or a median of said plurality of third average correlation coefficients except the largest one thereof.

17. The cell search apparatus for a mobile station in a mobile communication system according to Claim 13, characterized in that said reference value is set on the basis of a plurality of said second average correlation coefficients except the largest one thereof.

18. The cell search apparatus for a mobile station in a mobile communication system according to Claim 17, characterized in that said reference value is an average or a median of said plurality of second average correlation coefficients except the largest one thereof.

19. The cell search apparatus for a mobile station in a mobile communication system according to Claim 13, characterized in that said reference value can be set on the basis of a plurality of said first average correlation coefficients.

20. The cell search apparatus for a mobile station in a mobile communication system according to Claim 19, characterized in that said reference value is an average or a median of an arbitrary number of said first average correlation coefficients selected from said plurality of first average correlation coefficients in the ascending order of the value.

21. A cell search apparatus for a mobile station in a mobile communication system, the apparatus descrambling a common pilot signal on the basis of information on known scramble codes and frame boundaries, and detecting a scramble code on the basis of an average correlation coefficient, the method being characterized by comprising:

judgement means for judging detection results for said frame boundaries and scramble codes on the basis of a ratio of the largest one of a plurality of said average correlation coefficients to a predetermined reference value.

22. The cell search apparatus for a mobile station in a mobile communication system according to Claim 21, characterized in that said reference value is set on the basis of interference power calculated from said received signal by said mobile station.

23. The cell search apparatus for a mobile station in a mobile communication system according to Claim 22, characterized in that said reference value is set on the basis of a plurality of said average correlation coefficients except the largest one thereof.

24. The cell search apparatus for a mobile station in a mobile communication system according to Claim 23,

characterized in that said reference value is an average or a median of a plurality of said average correlation coefficients except the largest one thereof.